Appl. Serial No. 10/084,214

SJ0920010056US1/IBMS038-0549

Amdt. Dated June 6, 2006

Reply to Office Action of April 6, 2006

**REMARKS** 

Claims 1-42 are pending.

In paragraph 15 on page 7 of the Office Action, claims 12-41 were rejected under 35

U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and

distinctly claim the subject matter which Applicants regard as the invention.

More particularly, claim 12 was rejected because the Office Action alleges that there is

no relationship made between the host and the backplane or the second interface associated with

the backplane. The Office Action indicates that it is not clear whether or not communication is

involved.

With regard to claims 23 and 34, the Office Action alleges that there is no relationship

between cache locking in the preamble to anything else in the claim.

Applicants respectfully traverse the rejection. First, in Applicants' previous response,

claims 23 and 34 were amended and the phrase regarding locking in the preamble was deleted.

Thus, Applicants respectfully submit that the continued rejection of claims 23 and 34 is improper

and moot in view of Applicants' previous response.

With regard to claim 12, the scope of the claim must be clear to a hypothetical person

possessing the ordinary level of skill in the pertinent art and whether one skilled in the art would

understand the bounds of the claim when read in light of the specification. If the claims read in

light of the specification reasonable apprise those skilled in the art of the scope of the invention,

35 U.S.C. § 112, second paragraph requires no more.

Turning to the specification and drawings, Fig. 1 clearly shows a host coupled to

controller 118 and shows the backplane coupled to the controllers and the storage device.

Moreover, on page 14, line 14 to page 15, line 7, the specification clearly describes controllers

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118 and 120 that are in turn connected to disk array 108 via bus (or busses) 150 and to host

computer 102 via bus 154. Further, the specification states that one of ordinary skill in the art

will readily recognize that interface bus 150 between the multiple active disk array controllers

118 and 120 and disk array 108 may be any of several industry standard interface busses and that

circuits for controlling bus 150 are well known to those of ordinary skill in the art. Still further,

the specification states that interface bus 154 may be any of several standard industry interface

busses including SCSI, Ethernet (LAN), Token Ring (LAN), etc. and that circuits appropriate for

controlling bus 154 are well known to those of ordinary skill in the art.

Accordingly, it is clear that the host communicates with controller 118 via and standard

interfaces over bus 154 and that controllers 118 and 120 communicate with the storage devices

110 in disk array 108 via the backplane and standard interfaces.

Therefore, Applicants respectfully submit that the claims are definite and meet the

requirements of 35 U.S.C. § 112, second paragraph.

On page 4 of the Office Action, claims 1-11 and 23-42 were rejected under the judicially

created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S.

Patent No. 6,862,668 to McKean et al. in view of Moriyama et al. On page 6 of the Office

Action, claims 12-22 were rejected under the judicially created doctrine of obviousness-type

double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,862,668 to McKean et

al. in view of Moriyama et al.

In paragraph 16 on page 8 of the Office Action, claims 1-8, 10-11, 23-30 and 32-42 were

rejected under 35 U.S.C. § 103 (a) as being unpatentable over Simpson in view of Moriyama et

al. The Office Action admits that Simpson also fails to teach using data objects that represent

discrete partitions of the task to be performed and states for each partition.

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In paragraph 41 on page 13 of the Office Action, claims 9 and 31 were rejected under 35

U.S.C. § 103 (a) as being unpatentable over Simpson in view of Moriyama et al. and further in

view of Stuttard et al.

In paragraph 43 on page 14 of the Office Action, claims 12-19 and 21-22 were rejected

under 35 U.S.C. § 103 (a) as being unpatentable over Pecone in view of Moriyama et al. The

Office Action admits that Pecone also fails to teach using data objects that represent discrete

partitions of the task to be performed and states for each partition.

In paragraph 47 on page 15 of the Office Action, claim 20 was rejected under 35 U.S.C. §

103 (a) as being unpatentable over Simpson in view of Moriyama et al. and further in view of

Stuttard et al.

Applicants traverse the above rejections.

The primary references in the above rejections are McKean et al., Simpson and Pecone.

The Office Action admits that McKean et al., Simpson and Pecone fail to disclose, teach or

suggest a task coordination data object that represents discrete partitions of the task to be

performed.

However, in each of the rejections, the Office Action states that Moriyama discloses task

coordination data object that represents discrete partitions of the task to be performed.

Moriyama discloses a method for communication between objects wherein the

communication mechanism of a first object and the communication mechanism of a second

object differ. A mailer function is provided for each of the first and second objects for realizing

message delivery between the first and second objects. Accordingly, Moriyama discloses

different objects with different functions and provides a mailer function for each object for

realizing message delivery between the first and second objects.

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However, Moriyama is completely silent regarding data object that represents discrete

partitions of the task to be performed. Moriyama discloses a method wherein synchronization of

parallel execution of communication between a plurality of objects existing in a plurality of

different operating environments is provided. Further, Moriyama discloses a Scheduler for

managing the state of an object and maintains states for each object. However, Moriyama fails

to disclose data object that represents discrete partitions of the task to be performed. Moriyama

fails to disclose states for each partition of the data object representing the task to be performed.

Thus, because McKean et al., Simpson, Pecone and Moriyama fail to disclose, teach or

suggest a task coordination data object that represents discrete partitions of the task to be

performed, Applicants respectfully submit that the claims are patentable over McKean et al.,

Simpson, Pecone and Moriyama. Even if McKean et al., Simpson, Pecone and Moriyama are

combined, the resulting combination would not enable a task to be performed to be broken into

partitions that may then be separately executed by different controllers in order to minimize the

amount of time required to perform the a task.

Stuttard et al. fail to overcome the deficiencies of McKean et al., Simpson, Pecone and

Moriyama et al. Stuttard et al. merely discloses a semaphore communication scheme. Stuttard et

al. does not mention establishing a task coordination data object shared by a plurality of

controllers, wherein the task coordination data object represents discrete partitions of the task to

be performed and states for each partition. Stuttard et al. also fails to suggest a free controller

selecting a partition of the task available for processing as indicated by the states represented in

the task coordination data object. .

Therefore, Applicants respectfully submit that claims 1, 12, 23, 34 and 42 are patentable

over McKean et al., Simpson, Pecone, Moriyama et al. and Stuttard et al.

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Dependent claims 2-11, 13-22, 24-33 and 35-41 are also patentable over the references,

because they incorporate all of the limitations of the corresponding independent claims 1, 12, 23

and 34 respectively. Further dependent claims 2-11, 13-22, 24-33 and 35-41 recite additional

novel elements and limitations. Applicants reserve the right to argue independently the

patentability of these additional novel aspects. Therefore, Applicants respectfully submit that

dependent claims 2-11, 13-22, 24-33 and 35-41 are patentable over the cited references.

On the basis of the above amendments and remarks, it is respectfully submitted that the

claims are in immediate condition for allowance. Accordingly, reconsideration of this

application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this

communication, please contact Attorney for Applicant, David W. Lynch, at 423-757-0264.

Respectfully submitted,

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